# abcam

# Product datasheet

# Anti-Osteoprotegerin antibody ab73400

★★★★ 10 Abreviews 73 References 4 图像

概述

产品名称 Anti-Osteoprotegerin抗体

描述 兔多克隆抗体to Osteoprotegerin

宿主 Rahhit

经测试应用 适用于: ICC/IF, IHC-P, WB

种属反应性 与反应: Human

免疫原 Synthetic peptide corresponding to Osteoprotegerin aa 200-300 (internal sequence) conjugated

预测可用于: Mouse, Rat, Sheep, Cow, Pig \_\_\_\_\_\_

to keyhole limpet haemocyanin. (Peptide available as ab73399)

阳性对照 ICC/IF: HepG2 cells.

常规说明 The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

> Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯度 Immunogen affinity purified

**克隆** 多克隆

**同种型** IgG

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab73400于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P	<b>★★★★★ (4)</b>	Use at an assay dependent concentration.
WB	<b>★★★★</b> ★ ★ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 48 kDa (predicted molecular weight: 46 kDa).

#### 靶标

功能 Acts as decoy receptor for RANKL and thereby neutralizes its function in osteoclastogenesis.

Inhibits the activation of osteoclasts and promotes osteoclast apoptosis in vitro. Bone

homeostasis seems to depend on the local RANKL/OPG ratio. May also play a role in preventing arterial calcification. May act as decoy receptor for TRAIL and protect against apoptosis. TRAIL

binding blocks the inhibition of osteoclastogenesis.

组织特异性 Highly expressed in adult lung, heart, kidney, liver, spleen, thymus, prostate, ovary, small intestine,

thyroid, lymph node, trachea, adrenal gland, testis, and bone marrow. Detected at very low levels

in brain, placenta and skeletal muscle. Highly expressed in fetal kidney, liver and lung.

疾病相关 Defects in TNFRSF11B are the cause of juvenile Paget disease (JPD) [MIM:239000]; also known

as hyperostosis corticalis deformans juvenilis or hereditary hyperphosphatasia or chronic congenital idiopathic hyperphosphatasia. JPD is a rare autosomal recessive osteopathy that presents in infancy or early childhood. The disorder is characterized by rapidly remodeling woven bone, osteopenia, debilitating fractures, and deformities due to a markedly accelerated rate of bone remodeling throughout the skeleton. Approximately 40 cases of JPD have been reported worldwide. Unless it is treated with drugs that block osteoclast-mediated skeletal resorption, the

disease can be fatal.

序列相似性 Contains 2 death domains.

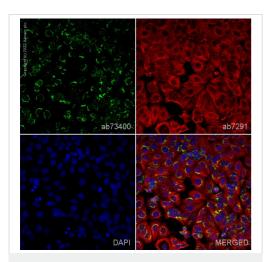
Contains 4 TNFR-Cys repeats.

翻译后修饰 N-glycosylated. Contains sialic acid residues.

The N-terminus is blocked.

细**胞定位** Secreted.

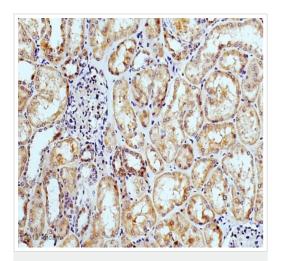
### 图片



Immunocytochemistry/ Immunofluorescence - Anti-Osteoprotegerin antibody (ab73400)

ab73400 staining Osteoprotegerin in HepG2 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab73400 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), preadsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Osteoprotegerin antibody (ab73400)

Image courtesy of Carl Hobbs (Kings College London, United Kingdom)

IHC-P image of Osteoprotegerrin staining on Rat kidney sections using ab73400 (1:4000). The sections were deparaffinized and subjected to heat mediated antigen retrieval using citric acid. The sections were blocked using 1% BSA for 10 mins at 21°C. ab73400 was diluted 1:4000 in TBS buffer (containing BSA and Azide) and sections were then incubated with ab73400 for 2 hours at 21°C. The secondary antibody used was Biotin conjugated Goat polyclonal to Rabbit IgG (1:250).



Western blot - Anti-Osteoprotegerin antibody (ab73400)

All lanes: Anti-Osteoprotegerin antibody (ab73400) at 1 µg/ml

Lane 1 : SK N BE (Human neuroblastoma) Whole Cell LysateLane 2 : K562 (Human erythromyeloblastoid leukemia cell line)Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

# **Secondary**

**All lanes :** Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

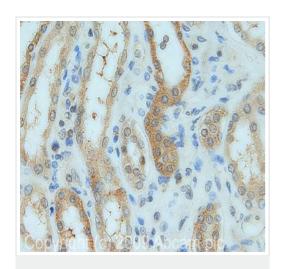
**Predicted band size:** 46 kDa **Observed band size:** 48 kDa

Additional bands at: 105 kDa, 14 kDa. We are unsure as to the

identity of these extra bands.

Exposure time: 8 minutes

Osteoprotegerin contains a number of potential glycosylation sites (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Osteoprotegerin antibody (ab73400)

IHC image of Osteoprotegerin staining in Human Normal Kidney FFPE section, performed on a BondTM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab73400, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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